



2/13

## RAW SEQUENCE LISTING ERROR REPORT

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Application Serial Number: 09/928,847A  
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Date Processed by STIC: 2/19/2002

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1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>> , EFS Submission

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2. U.S. Postal Service: U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202

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Revised 01/29/2002



OIPE

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/928,847A

DATE: 02/19/2002  
TIME: 14:36:23

Input Set : A:\10022204.ST25.txt  
Output Set: N:\CRF3\02192002\I928847A.raw

3 <110> APPLICANT: Novozymes A/S  
4 Jorgensen, Steen T  
5 Rasmussen, Michael D  
6 Andersen, Jens Tonne  
7 Olsen, Carsten  
9 <120> TITLE OF INVENTION: Multiple Insertion of Genes  
11 <130> FILE REFERENCE: 10022.204-US  
13 <140> CURRENT APPLICATION NUMBER: 09/928847A  
14 <141> CURRENT FILING DATE: 2001-08-13  
16 <160> NUMBER OF SEQ ID NOS: 50  
18 <170> SOFTWARE: PatentIn version 3.1  
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22 <212> TYPE: DNA  
23 <213> ORGANISM: Artificial Sequence  
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34 <212> TYPE: DNA  
35 <213> ORGANISM: Artificial Sequence  
37 <220> FEATURE:  
38 <223> OTHER INFORMATION: Primer  
40 <400> SEQUENCE: 2  
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43 agtttc 67  
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47 <211> LENGTH: 33  
48 <212> TYPE: DNA  
49 <213> ORGANISM: Artificial Sequence  
51 <220> FEATURE:  
52 <223> OTHER INFORMATION: Primer  
54 <400> SEQUENCE: 3  
55 gactgaattc cgtatccatt cctgcgatata gag 33  
58 <210> SEQ ID NO: 4  
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60 <212> TYPE: DNA  
61 <213> ORGANISM: Artificial Sequence  
63 <220> FEATURE:  
64 <223> OTHER INFORMATION: Primer  
66 <400> SEQUENCE: 4

PS  
Does Not Comply  
Corrected Diskette Needed

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/928,847A

DATE: 02/19/2002

TIME: 14:36:23

Input Set : A:\10022204.ST25.txt  
 Output Set: N:\CRF3\02192002\I928847A.raw

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 75 <220> FEATURE:  
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 103 gttttcggcc gctgtccgtt cgtcttt 27  
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 115 gtgtgacgga taaggccgcc gtcattt 27  
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 139 agcattatttc ttcgaagtcg cattgg 26

## RAW SEQUENCE LISTING

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Output Set: N:\CRF3\02192002\I928847A.raw

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 150 <400> SEQUENCE: 11  
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 154 <210> SEQ ID NO: 12  
 155 <211> LENGTH: 3342  
 156 <212> TYPE: DNA  
 157 <213> ORGANISM: Bacillus licheniformis  
 159 <220> FEATURE:  
 160 <221> NAME/KEY: CDS  
 161 <222> LOCATION: (1303)..(2469)  
 162 <223> OTHER INFORMATION:  
 165 <220> FEATURE:  
 166 <221> NAME/KEY: misc\_feature  
 167 <222> LOCATION: (2685)..(2685)  
 168 <223> OTHER INFORMATION: n denotes an undetermined nucleotide  
 171 <400> SEQUENCE: 12  
 172 gcgtaccgtt aaagtcaac agcggtttct tccttttac atccatggat taaaaagggg 60  
 174 ttgaaaaaaag gtgagaaaaa gctttgttt gctttaacg gggctgcattg taatccttat 120  
 176 gctttctgcc tgcggccaaa aatcgcaaga agatgtgtg acggggctcg acaagaaggc 180  
 178 aaaagaatac acgtcctata aggcaaaaagc gaaaatgacc attgaaacgg ggaatgaccc 240  
 180 gcaggagtag aacgtggaaa tctggcataa aaaaccttct ctttaccggg tctatttgg 300  
 182 aaacccgaaa aaagaccaga gccaggtat cttgcgcaat gaaaacggcg tgggggtttt 360  
 184 gactccgtcg ctgaataaaa gcttccgctt tcacagcgac tggcccaata acagcagcca 420  
 186 ggtatactta ttcgaatcgc tcgtaaagga tgtcaaaaat gatggggaaag cttcttttc 480  
 188 cgcaaaggat tcaaaataca ttttgaac gaaaacgaat tatcagcata atcagatgct 540  
 190 gcccactcg gaaatcgaaa tccataaaaa gaccatggct ctttcatcg 600  
 192 ggataccgac cgcaaaccga tggtaaaggt tgagttaca agcttgaat tcgataagcc 660  
 194 gctcgataaa gactctttt atgaaaagaa aaatatgacg ctgtctcaaa ttgacgtac 720  
 196 gacaaggcgct gacgtgtcag actcttcgc tgtcaaaaacg ccgcgcgtat tgcctcagg 780  
 198 cgtaaaaaaat cttgaagaga aagagatgac gactgaagac ggcaaacggg tcgtcatcac 840  
 200 atatggcggt gaaaaatcct ttacattgtat tcagaaaaa gcccgcgtcg ccaaaacatc 900  
 202 cactccgtt tccatgaacg gagagccgt tgacttcggc ttcacggctg ggcactgac 960  
 204 ggataaaatcg ttgtcatgga catatgacgg agtcattac tttatctcat cagaagatct 1020  
 206 ttctcaagat gaacttctga tggttgcaaa aagcatgcac ggacagtctt cggaaatagac 1080  
 208 tgtgcgtat ccggcagcct gtttccggc cggaaagcgaa aagcaggctt ttttatattt 1140  
 210 gcgtcgcaag cgtatgatt cgacagctt tccgtaaaat gtataccgtg ccagcaattt 1200  
 212 ttcttttgtt cagggtctgat gatcccgtc aaaattccc tttctccgaa cttttagta 1260  
 214 tggatggaaag gacgagtgaa acaaggaaca ggaagtgta tg atg agc tta aaa 1314  
 215 Met Ser Leu Lys  
 216 1  
 218 cca ttc tat aga aag aca tgg gcc gaa atc gat tta acg gct tta aaa 1362  
 219 Pro Phe Tyr Arg Lys Thr Trp Ala Glu Ile Asp Leu Thr Ala Leu Lys  
 220 5 10 15 20  
 222 gaa aac gtc cgc aat atg aag cgg cac atc ggc gag cat gtc cgc ctg 1410

RAW SEQUENCE LISTING  
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223	Glu	Asn	Val	Arg	Asn	Met	Lys	Arg	His	Ile	Gly	Glu	His	Val	Arg	Leu	
224						25					30					35	
226	atg	gcc	gtc	gtt	aaa	gcg	aat	gcc	tac	gga	cac	ggg	gat	gca	cag	gta	1458
227	Met	Ala	Val	Val	Lys	Ala	Asn	Ala	Tyr	Gly	His	Gly	Asp	Ala	Gln	Val	
228						40				45					50		
230	gcg	aag	gcg	gct	ctt	gca	gaa	ggg	gcg	tcc	att	ctt	gct	gtg	gct	tta	1506
231	Ala	Lys	Ala	Ala	Leu	Ala	Glu	Gly	Ala	Ser	Ile	Leu	Ala	Val	Ala	Leu	
232						55				60					65		
234	ttg	gat	gaa	gcg	ctt	tcg	ctg	agg	gcg	cag	ggg	att	gaa	gaa	ccg	att	1554
235	Leu	Asp	Glu	Ala	Leu	Ser	Leu	Arg	Ala	Gln	Gly	Ile	Glu	Glu	Pro	Ile	
236						70				75					80		
238	ctt	gtc	ctc	ggt	gca	gtg	ccg	acc	gaa	tat	gca	agc	att	gcc	gcg	gaa	1602
239	Leu	Val	Leu	Gly	Ala	Val	Pro	Thr	Glu	Tyr	Ala	Ser	Ile	Ala	Ala	Glu	
240	85					90					95					100	
242	aag	cgc	att	atc	gtg	act	ggc	tac	tcc	gtc	ggc	tgg	ctg	aaa	gac	gtg	1650
243	Lys	Arg	Ile	Ile	Val	Thr	Gly	Tyr	Ser	Val	Gly	Trp	Leu	Lys	Asp	Val	
244						105				110					115		
246	ctc	ggt	ttt	ctg	aat	gag	gcc	gaa	gct	cct	ctt	gaa	tat	cat	ttg	aag	1698
247	Leu	Gly	Phe	Leu	Asn	Glu	Ala	Pro	Leu	Glu	Tyr	His	Leu	Lys			
248						120				125					130		
250	atc	gac	acg	ggc	atg	ggc	cgc	ctt	ggc	tgc	aaa	acg	gaa	gaa	gag	atc	1746
251	Ile	Asp	Thr	Gly	Met	Gly	Arg	Leu	Gly	Cys	Lys	Thr	Glu	Glu	Ile		
252						135				140					145		
254	aaa	gaa	atg	atg	gag	atg	acc	gaa	tcg	aac	gat	aag	ctc	aat	tgt	acg	1794
255	Lys	Glu	Met	Met	Glu	Met	Thr	Glu	Ser	Asn	Asp	Lys	Leu	Asn	Cys	Thr	
256						150				155					160		
258	ggc	gtg	ttc	act	cat	ttc	gcc	acg	gcg	gac	gaa	aag	gac	acc	gat	tat	1842
259	Gly	Val	Phe	Thr	His	Phe	Ala	Thr	Ala	Asp	Glu	Lys	Asp	Thr	Asp	Tyr	
260	165					170					175					180	
262	ttc	aac	atg	cat	ctt	gac	cgc	ttt	aaa	gag	ctg	atc	agc	ccc	ttc	ccg	1890
263	Phe	Asn	Met	His	Leu	Asp	Arg	Phe	Lys	Glu	Leu	Ile	Ser	Pro	Phe	Pro	
264						185				190					195		
266	ctt	gac	cgt	ttg	atg	gtg	cat	tcg	tca	aac	agc	gcc	gcg	ggt	ctg	cgc	1938
267	Leu	Asp	Arg	Leu	Met	Val	His	Ser	Ser	Asn	Ser	Ala	Ala	Gly	Leu	Arg	
268						200				205					210		
270	ttc	agg	gaa	cag	cta	ttt	aat	gcc	gtc	cgc	ttc	ggc	atc	ggc	atg	tac	1986
271	Phe	Arg	Glu	Gln	Leu	Phe	Asn	Ala	Val	Arg	Phe	Gly	Ile	Gly	Met	Tyr	
272						215				220					225		
274	ggt	ttg	gcg	ccg	tca	acc	gaa	ata	aaa	gac	gag	ctg	ccg	ttt	cgt	ctg	2034
275	Gly	Leu	Ala	Pro	Ser	Thr	Glu	Ile	Lys	Asp	Glu	Leu	Pro	Phe	Arg	Leu	
276						230				235					240		
278	cgg	gaa	gtg	ttt	tcg	ctt	cat	acc	gaa	ctc	acc	cat	gtg	aaa	aaa	att	2082
279	Arg	Glu	Val	Phe	Ser	Leu	His	Thr	Glu	Leu	Thr	His	Val	Lys	Lys	Ile	
280	245					250					255					260	
282	aaa	aaa	ggc	gag	agc	gtc	agc	tac	ggg	gcg	aca	tat	aca	gct	cag	cgc	2130
283	Lys	Lys	Gly	Glu	Ser	Val	Ser	Tyr	Gly	Ala	Thr	Tyr	Thr	Ala	Gln	Arg	
284						265				270					275		
286	gac	gaa	tgg	atc	ggg	aca	gtc	ccc	gtc	ggg	tat	gcc	gac	gga	tgg	ctg	2178
287	Asp	Glu	Trp	Ile	Gly	Thr	Val	Pro	Val	Gly	Tyr	Ala	Asp	Gly	Trp	Leu	

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Input Set : A:\10022204.ST25.txt

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288	280	285	290		
290	agg cgc ctg gcc gga acg gaa gtg	ctg atc gac gga aaa	cgc caa aaa	2226	
291	Arg Arg Leu Ala Gly Thr Glu Val	Leu Ile Asp Gly Lys	Arg Gln Lys		
292	295	300	305		
294	ata gca ggg aga atc tgc atg	gac cag ttc atg	att tcc ctt gcc gaa	2274	
295	Ile Ala Gly Arg Ile Cys	Met Asp Gln Phe Met	Ile Ser Leu Ala Glu		
296	310	315	320		
298	gaa tac cct gtc ggc aca aag	gtt acc ttg atc	gga aag caa aaa gac	2322	
299	Glu Tyr Pro Val Gly Thr Lys	Val Thr Leu Ile	Gly Lys Gln Lys Asp		
300	325	330	335	340	
302	gaa tgg atc tca gtc gac	gaa atc gcc caa aat	ttg cag acg atc aat	2370	
303	Glu Trp Ile Ser Val Asp	Glu Ile Ala Gln Asn	Leu Gln Thr Ile Asn		
304	345	350	355		
306	tat gaa att acc tgt atg	ata agt tca agg	gtg ccc cgt atg	ttt ttg	2418
307	Tyr Glu Ile Thr Cys Met	Ile Ser Ser Arg	Val Pro Arg Met	Phe Leu	
308	360	365	370		
310	gaa aat ggg agt ata atg	gaa ata agg aat	ccg atc ttg	cct gat caa	2466
311	Glu Asn Gly Ser Ile Met	Glu Ile Arg Asn	Pro Ile Leu Pro Asp Gln		
312	375	380	385		
314	tcc taaaaattga tgaattagcg	aaaaaacaac	tttgcttgcg	aaaagaataa	2519
315	Ser				
318	tatatgatt atgaatggaa	tggatagagt	gttgtatccg	taagtttgtt ggaggtgtat	2579
320	gttttgtct gaatccagcg	caacaactga	aatattgatt	cgcttgcac aagctttat	2639
322	atcagaactg gatgggttcg	tcatgcgaga	taaccgggag	caggnatga actgattttta	2699
324	ccaagccaca aaaatgttagg	aacgcgaacg	caaaaaatcg	acaaattccg ggaatcgat	2759
326	agaagcggtt atatggagat	ggccaagatc	caatttgaac	atcttctgtt aggctcaatt	2819
328	tgcagagttt gaggctgaaa	acacagttaga	gcgcgttacta	agcggatgtat aatcatttga	2879
330	ttgttaaacg cggcgatgtt	tatttgtct	acctatctcc	tgttgttggc tcagaacaag	2939
332	gcgggggtgcg cccggttta	gtgattcaaa	acaacatcg	caatcgcttc agcccaactg	2999
334	ctattttgc agccataaca	gcccaaatac	agaaagcaaa	attacctacc cacgtcgaaa	3059
336	ttgatgcgaa acgctacgg	tttggaaagag	actccgttat	attgctcgaa caaattcgga	3119
338	cgattgacaa gcaaagat	acggacaaaa	tcacccatct	cgatgtgaa atgatggaaa	3179
340	aggtcaacga agccttacaa	atcagtttgg	cactcattga	tttttaatat tgatgaaagt	3239
342	tgctcgaggc gaaagagcaa	cttttttgt	gttcaaaaat	aacaatacga tataatggta	3299
344	actgttagtc ctaaaaatgt	tagccagatg	tagtcagggg	gat	3342
347	<210> SEQ ID NO: 13				
348	<211> LENGTH: 389				
349	<212> TYPE: PRT				
350	<213> ORGANISM: <i>Bacillus licheniformis</i>				
352	<220> FEATURE:				
353	<221> NAME/KEY: misc_feature				
354	<222> LOCATION: (2685)..(2685)				
355	<223> OTHER INFORMATION: n denotes an undetermined nucleotide				
357	<400> SEQUENCE: 13				
359	Met Ser Leu Lys Pro Phe Tyr Arg Lys Thr Trp Ala Glu Ile Asp Leu				
360	1	5	10	15	
363	Thr Ala Leu Lys Glu Asn Val Arg Asn Met Lys Arg His Ile Gly Glu				
364	20	25	30		
367	His Val Arg Leu Met Ala Val Val Lys Ala Asn Ala Tyr Gly His Gly				

This is  
an  
negative  
Please

Use of n and/or Xaa has been detected in the Sequence Listing. Review the Sequence Listing to insure a corresponding explanation is presented in the <220> to <223> fields of each sequence using n or Xaa. *Sequence*.

FYI

**VERIFICATION SUMMARY** DATE: 02/19/2002  
PATENT APPLICATION: US/09/928,847A TIME: 14:36:24

Input Set : A:\10022204.ST25.txt  
Output Set: N:\CRF3\02192002\I928847A.raw

L:322 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12  
L:1415 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:49